

**PBI-4**

**Performance Based Incentive (PBI) Title: Supplemental Waste Treatment and Disposal**

**Performance Fee available and assigned to this PBI: \$10,000,000**

|                        |          |               |           |
|------------------------|----------|---------------|-----------|
| ORP Assistant Manager: | ORP POC: | CH2M Manager: | CH2M POC: |
| J. Swailes             | D. Noyes | J. Eacker     | D. Allen  |

**Desired Endpoint/Outcome**

The objective of this PBI is to cost-effectively retrieve, treat, and dispose of tank waste using non-Waste Treatment and Immobilization Plant (WTP) supplemental treatment techniques such that:

1. A net savings is achieved relative to the U.S. Department of Energy (DOE) established costs of treating the wastes via vitrification in the WTP,
2. All retrieved tank waste completes treatment by 2028 via a combination of supplemental non-WTP treatment and treatment in the WTP, and
3. Wastes with high sulfate, chromate, or other chemical constituents that limit overall waste loading in glass are preferentially treated outside the WTP resulting in higher net WTP throughputs and efficiencies.

**Fee Payment Schedule**

Upon completion of each fee bearing milestone set forth herein Contractor will be paid either provisional fee or incremental fee, in accordance with Contract Clause H.2, "Provisional and Incremental Payments of Fee." Whether a milestone entitles Contractor to provisional fee or incremental fee is set forth in the milestone discussions contained herein.

**Fee Bearing Milestones**

1. Treat and Disposition Transuranic (TRU) and Low-Activity Waste (LAW). Performance Fee: \$5,000,000
  - a. The Contractor will earn \$5,000,000 in incremental fee for removal and treatment of 1,000,000 gallons (in tank volume) by 09/30/06 of either TRU sludge or other low-level Tank Farms waste that can be removed from the tanks, treated, and disposed of as non high-level waste (HLW).
    - A minimum of 750,000 gallons of TRU materials shall be included in the 1,000,000 gallons required for completion of this item.
    - TRU type materials shall be treated and stored for eventual shipment to the Waste Isolation Pilot Plant.
    - LAW type materials shall have been treated and disposed either on or off-site.
    - The waste form to be produced will not be HLW and will be classifiable as either low-level waste, low-level mixed waste, or TRU waste based upon the provisions, criteria, and definitions set forth in DOE O 435.1, "Radioactive Waste Management."
  - b. Incremental acceleration fee of \$800,000 shall be paid to the Contractor for each 100,000 gallons of additional waste that is retrieved and treated. Additional wastes in tank volume can be either TRU type materials or LAW type materials, with no restrictions on the balance between the waste types making up each 100,000 gallon increment.

2. Demonstration of Tank Waste Immobilization Technology. Performance Fee: \$5,000,000

- a. Testing for the selected technology using tank waste at a scale deemed appropriate to demonstrate performance. The Contractor will earn \$1,250,000 in incremental fee for completion of one or more tests as defined in an Office of River Protection (ORP) and Contractor agreed to testing strategy. If more than one test is required, fee shall be incrementally proportioned to the number of tests. (Performance Fee: \$1,250,000)
- b. First full-scale unit of immobilized tank waste (size depending on technology selected). The Contractor will earn \$1,250,000 in incremental fee for removal and immobilization of sufficient tank waste to make a full-scale container of immobilized tank waste. (Performance Fee: \$1,250,000)
- c. Startup of an immobilized tank waste production test system and generate one unit of immobilized tank waste. The Contractor will earn \$2,500,000 in incremental fee for startup of a production test system. (Performance Fee: \$2,500,000)
- d. Immobilized tank waste production demonstration. The Contractor will earn incremental acceleration fee of \$450,000 for removal and immobilization for each 10,000 gallons (in tank volume) of immobilized tank waste for the first 50,000 gallons. Contractor will earn incremental acceleration fee of \$300,000 for removal and immobilization for each 10,000 gallons (in tank volume) of immobilized tank waste for the next 150,000 gallons. Contractor will earn incremental acceleration fee of \$10 for removal and immobilization for each gallon (in tank volume) of immobilized tank waste thereafter.

**Government Furnished Services/Items (GFS/I)**

Provide DOE review/approval of DOE O 435.1 deliverables within 60 days of receipt (30-day review/comment + 30-day final approval) except as specified below.

Provide DOE review/approval of Hanford Federal Facility Agreement and Consent Order or Tri-Party Agreement deliverables within 15 working days of receipt, except as specified below.

ORP will respond to all other Contractor submittals (e.g., Authorization Basis, Safety Analysis Reports, Baseline Change Requests) required to complete this activity within 15 working days provided the submittals are complete and ORP is provided with reasonable notice of the intent to submit.

ORP will review/approve determinations associated with TRU waste within 60 days of Contractor submittal.

DOE will work with the Contractor to accept TRU tank waste into existing site facilities for interim storage.

**Commitments**

The Contractor shall:

- make fundamental changes in program logic and work performance,
- take actions to align Contractor organizations, work processes, etc., to achieve PBI outcomes,
- establish defensible technical, regulatory, and programmatic solutions,
- plan and lead all required internal and external discussions and interactions to achieve results incentivized in this PBI, and
- drive agreement within regulators and stakeholder groups for PBI outcomes.

The DOE ORP will:

- work with the Contractor and regulators to allow minimal or no Leak Detection Monitoring and Mitigation requirements for each retrieval activity.

### Definitions

"GFS/I" are those work elements that the DOE commits to perform to support the completion of this PBI. If DOE cannot provide GFS/I as described herein, then it shall be treated as a change in accordance with Contract Clause I.64, Federal Acquisition Regulation 52.243-2, "Changes-Cost Reimbursement, Alt II."

### Signature Block

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Edward S. Aromi, President  
and General Manager,  
CH2M HILL Hanford Group, Inc.

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Date

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David B. Amerine, Executive Vice President  
and Deputy General Manager  
CH2M HILL Hanford Group, Inc.

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Date

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John H. Swailes, Assistant Manager for Tank Farms  
U.S. Department of Energy, Office of River Protection

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Date

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Roy J. Schepens, Manager  
U.S. Department of Energy, Office of River Protection

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Date